

26-27th June 2021

IX. ONCO SURGERY DAYS

"Advances in HPB and GI Cancer Surgery and
Systemic Treatments"

e-SYMPOSIUM



ALPPS FOR COLORECTAL LIVER METASTASIS

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Full Professor and Chairman

Department of Gastrointestinal Surgery

Hepatopancreatobiliary Unit

Universidade Federal do Maranhão - Brazil

CASE 1



ALPPS FOR METASTASIS IN SEGMENTS I,II,III,IV,V,VII,AND VIII

CASE 1

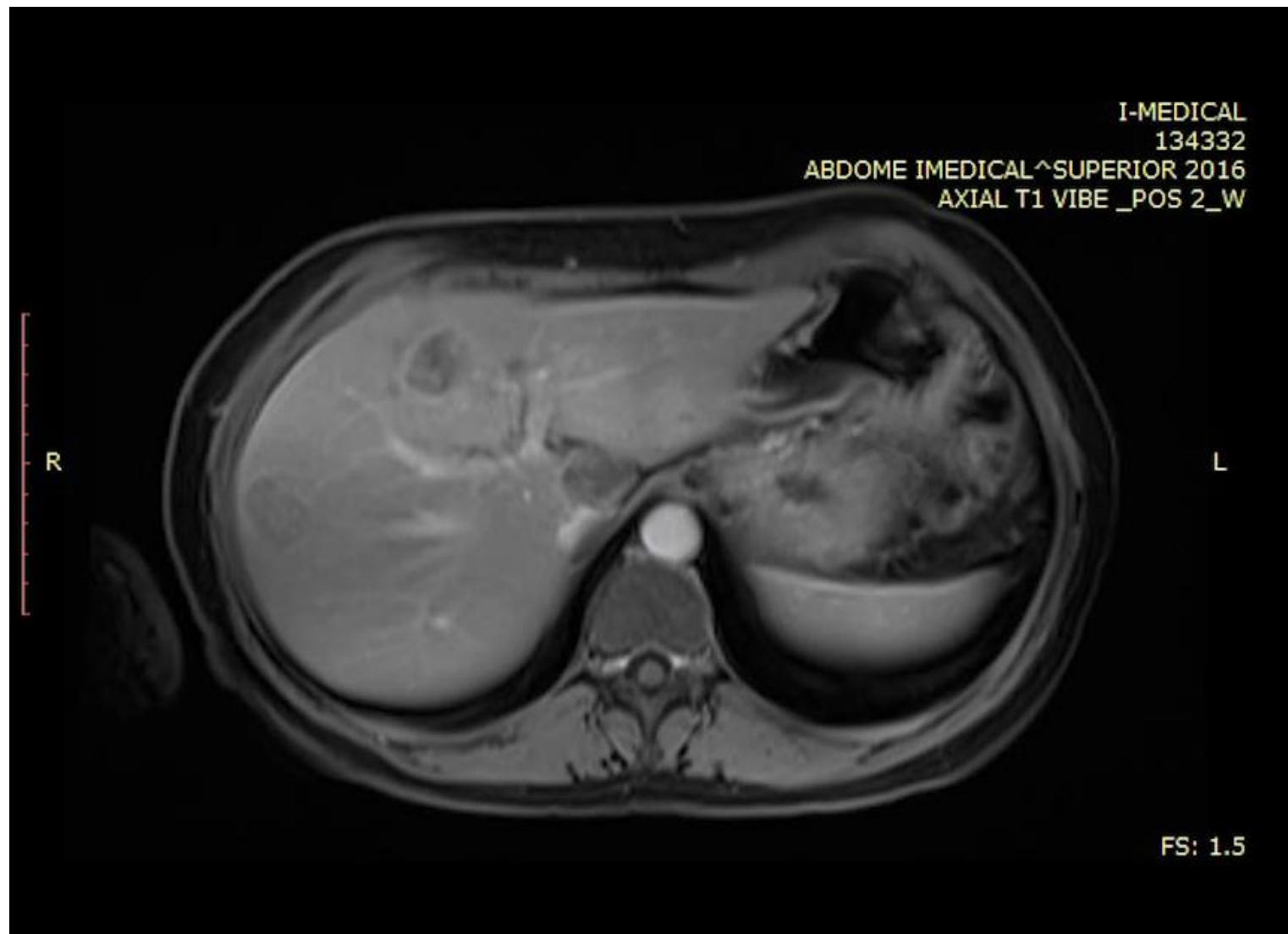
- ❑ 52-year-old female patient
 - Synchronous liver metastases
 - Left sided colon tumor
- ❑ The primary was asymptomatic.
- ❑ She underwent:
 - Left colectomy
 - Lymphadenectomy
 - Colostomy
- ❑ No chemotherapy

❑ KRAS Wild-type

ADENOCARCINOMA



MRI before chemotherapy



MRI

□ Liver metastases:

Segment: I

Involving the vena cava

Segments: II, III, IVa, V, VII, VIII

Chemotherapy

□ Nine cycles of FOLFIRI

MRI

□ After 8 months

MRI after chemotherapy



SEGMENT III



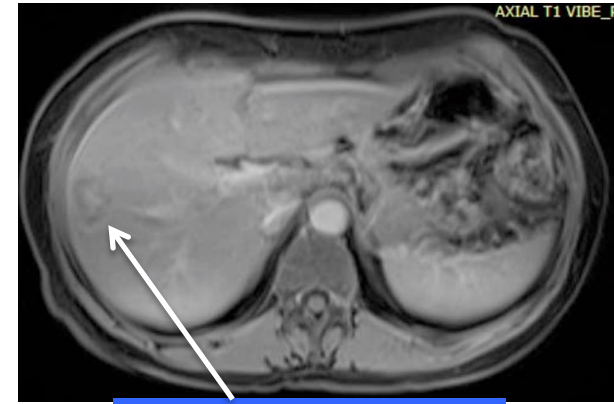
SEGMENT IVa



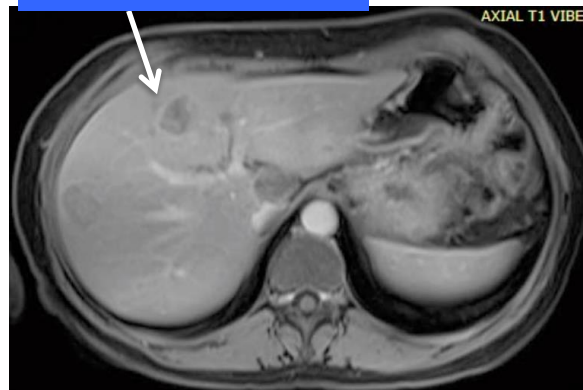
SEGMENT II



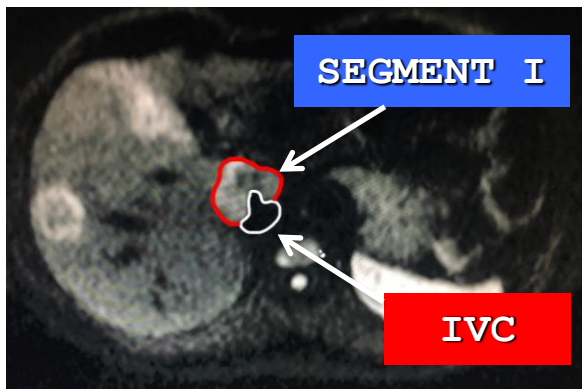
SEGMENT V/VIII



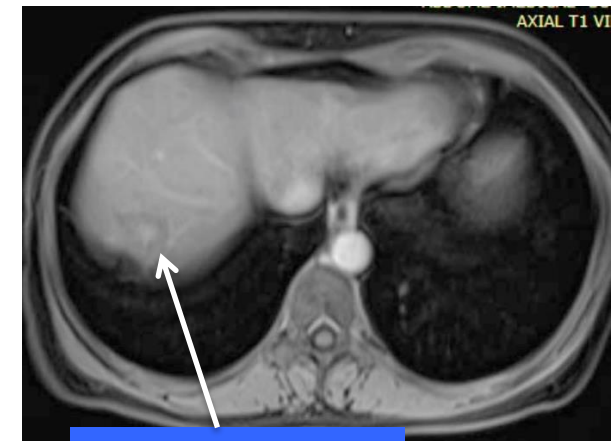
SEGMENT IVa/b



SEGMENT I



SEGMENT VII



MRI

Stable disease

CEA

☐ Before chemotherapy

CEA - 142 ng/L

☐ After chemotherapy

CEA - 3.2 ng/L

VOLUMETRY

☐ Liver 865.5 ml

☐ FLR 204.2 ml

Segments 2/3

FLR 23.6%

LIVER
VISION 

Name

Gender, Age

F, 052Y, 14373558

Date

30.11.2019

Liver View

Serie/s View

Liver

Liver :865.5 ml

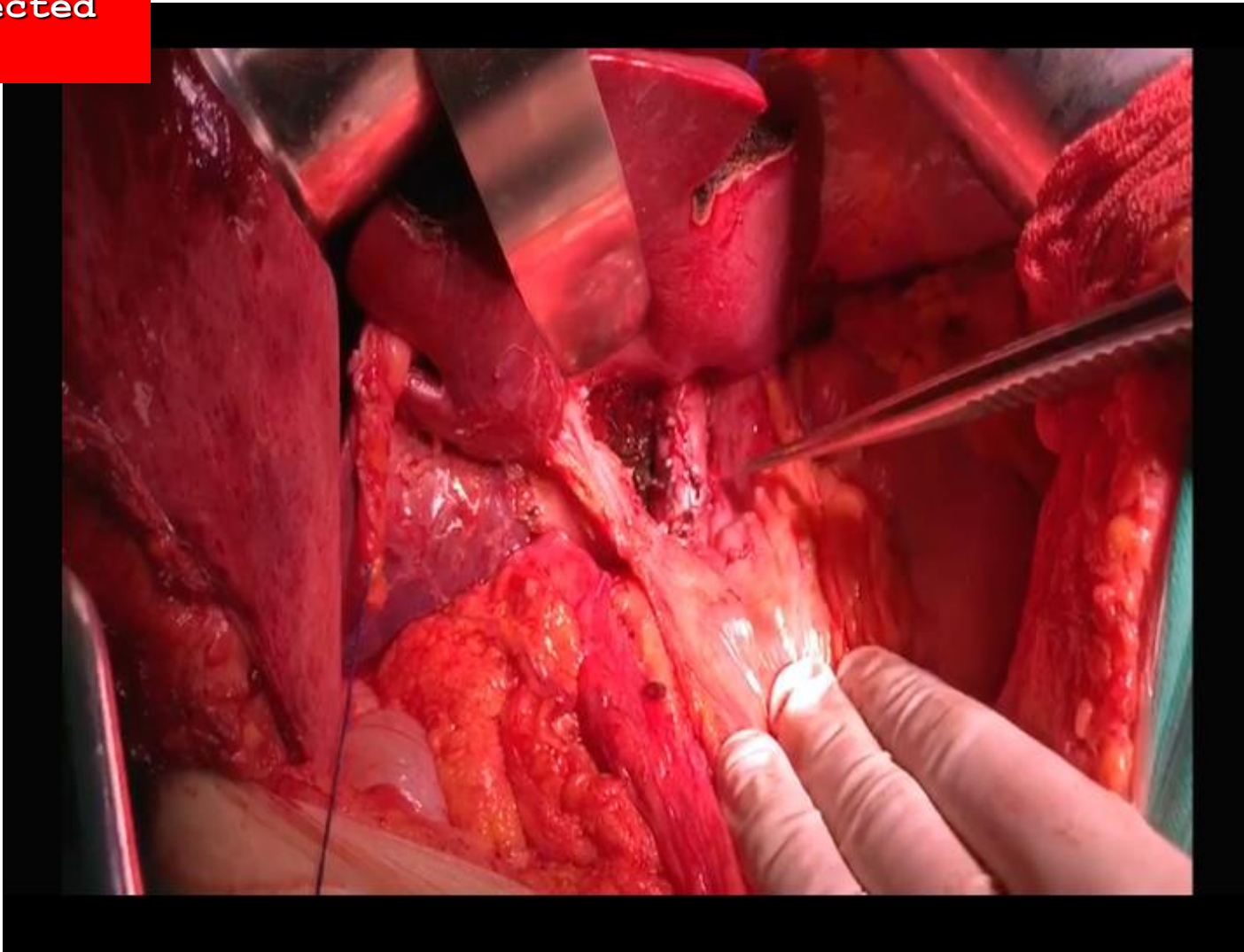
Cut Liver :649.4 ml / %75.0

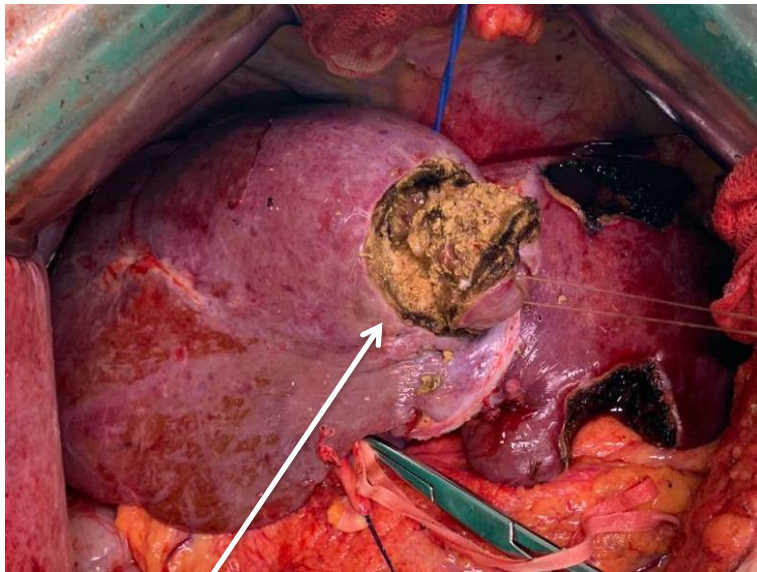
FLR :204.2 ml / %23.6

Courtesy: Prof. Deniz Balci (Ankara – Turkey)

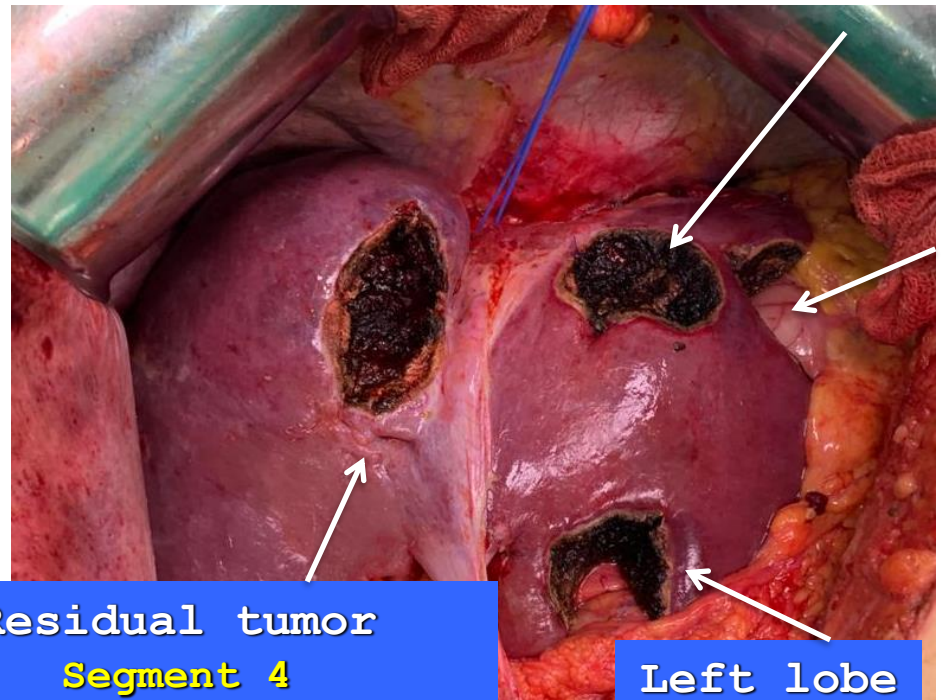
Caudate

- ☐ Resected
- ☐ IVC



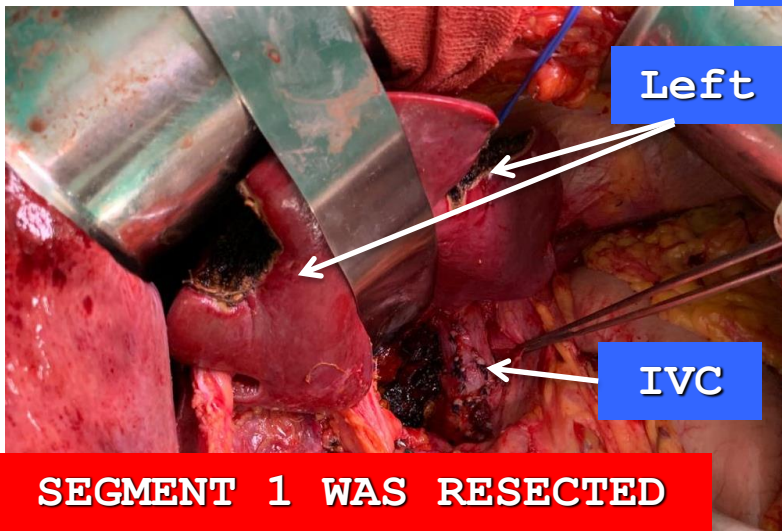


Segment 4



Residual tumor
Segment 4

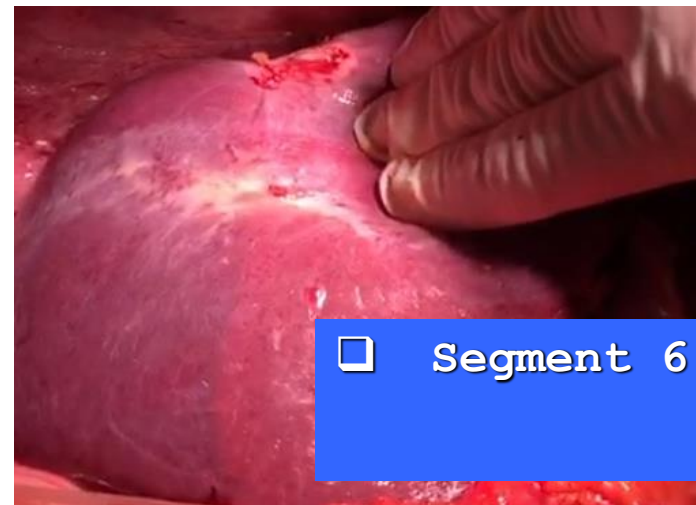
Left lobe



Left lobe

IVC

SEGMENT 1 WAS RESECTED



□ Segment 6,7
Ligated

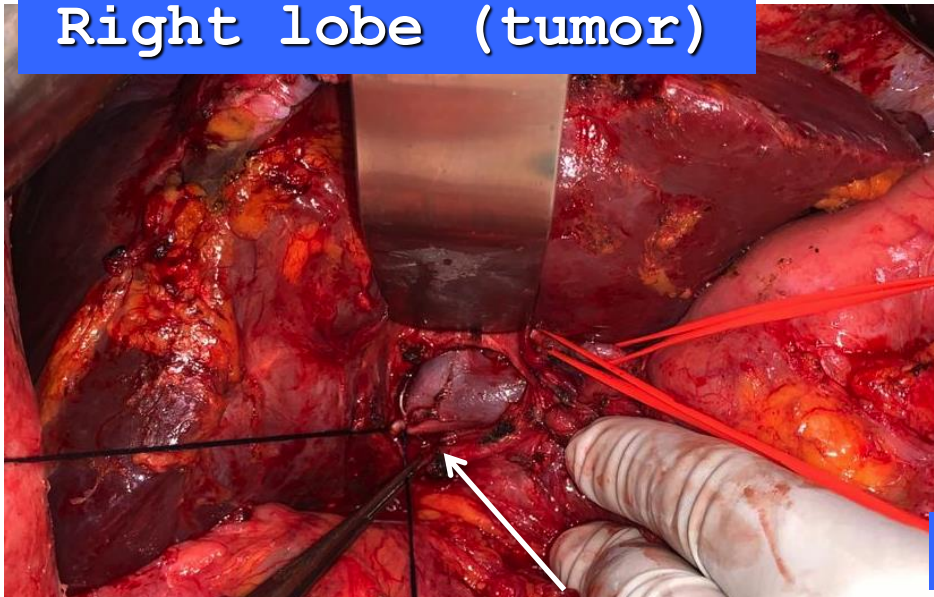
After 4 weeks



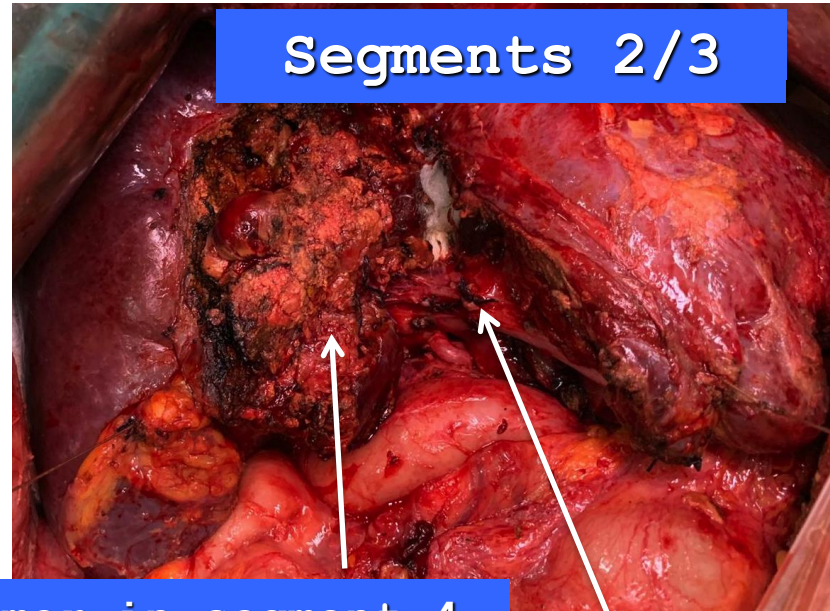
☐ Reoperation
ALPPS



Right lobe (tumor)



Segments 2/3

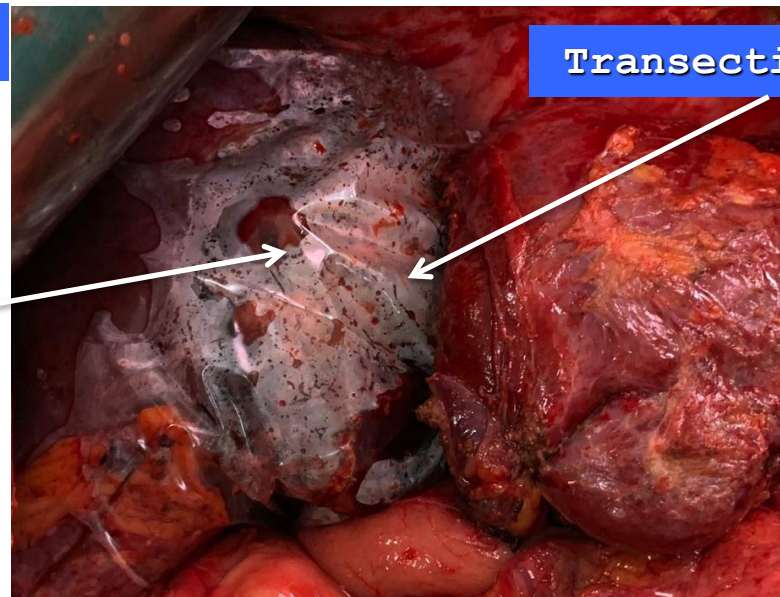


Tumor in segment 4

Right portal vein was ligated

Plastic bag (tumor)

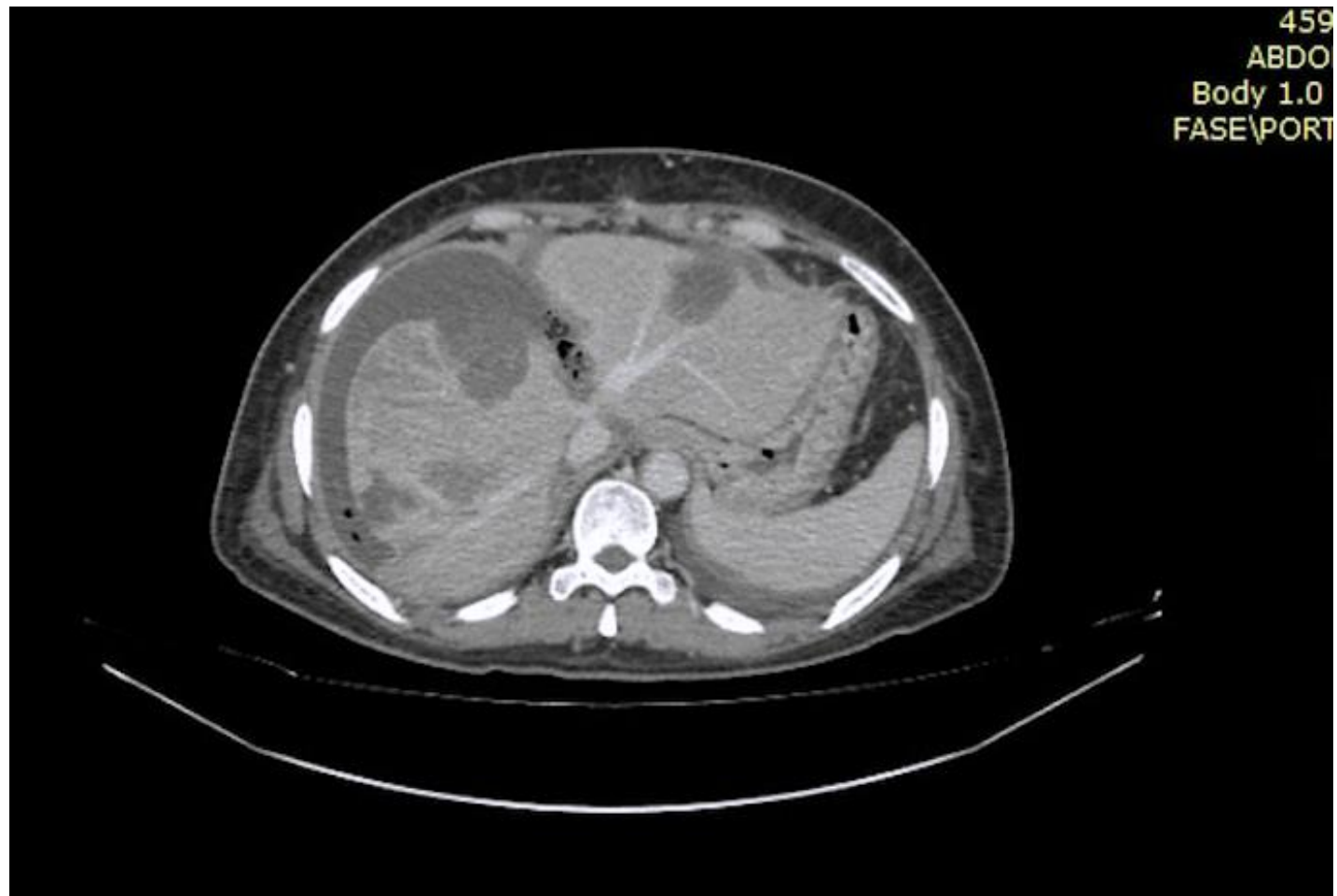
Transection line



CT scan

☐ After 6 days

☐ Portal phase

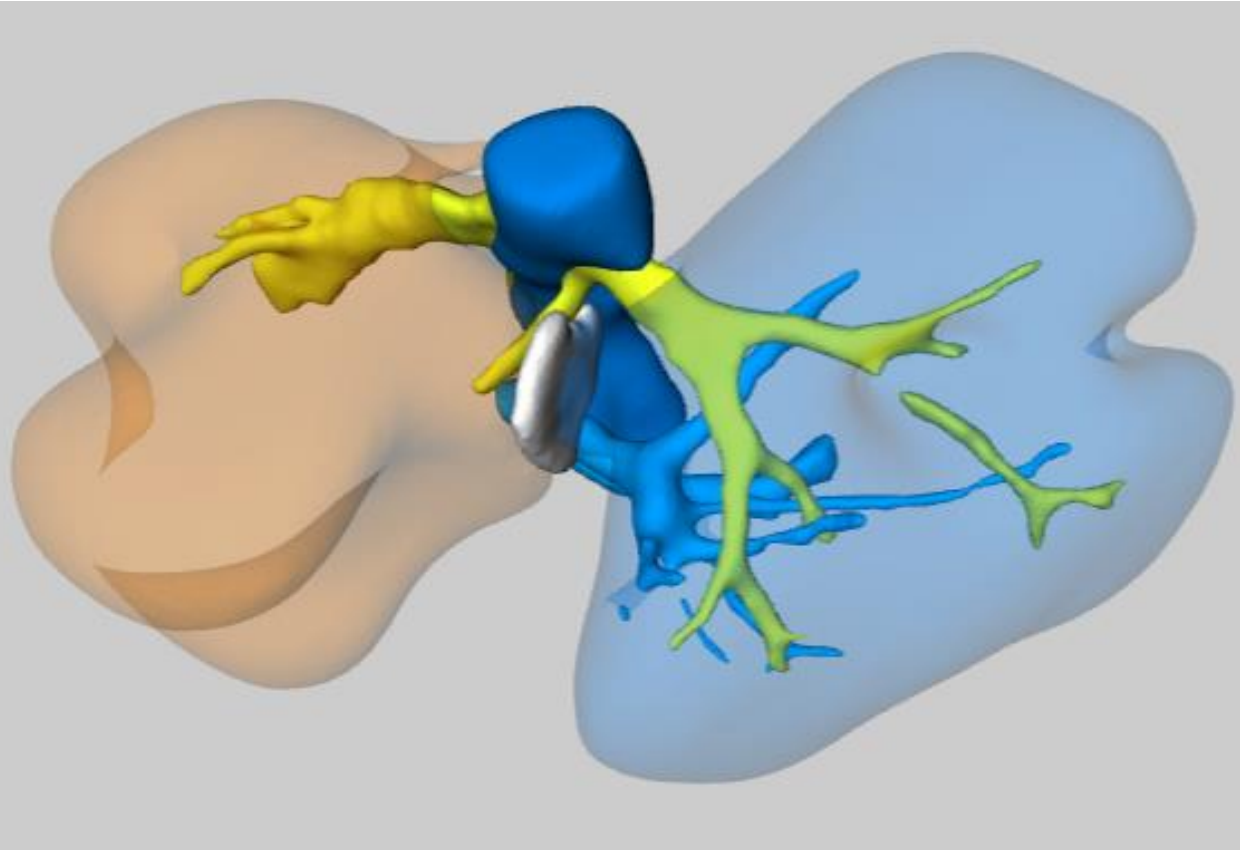


VOLUMETRY

☐ Liver 915.8 ml
☐ FLR 477.8 ml

Segments 2/3

FLR 52.2%



LIVER VISION

Name

Gender, Age

Date

Liver View ☐

Liver :915.8 ml ☐

Cut Liver :434.8 ml / %47.5 ☒

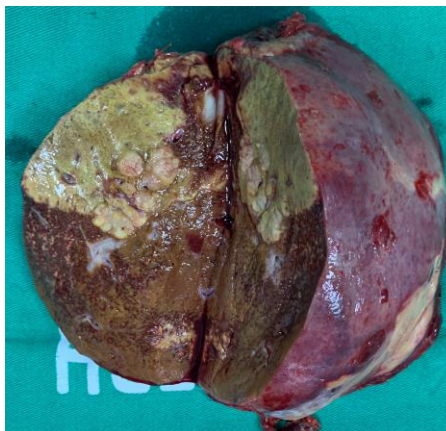
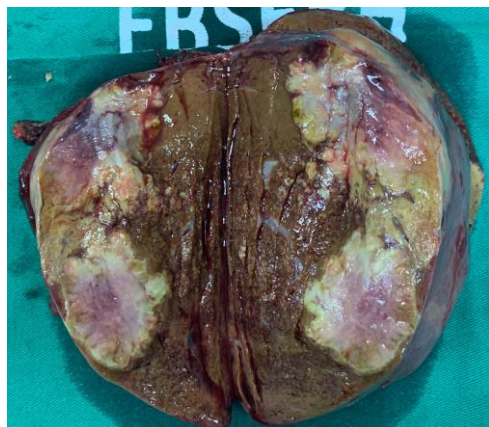
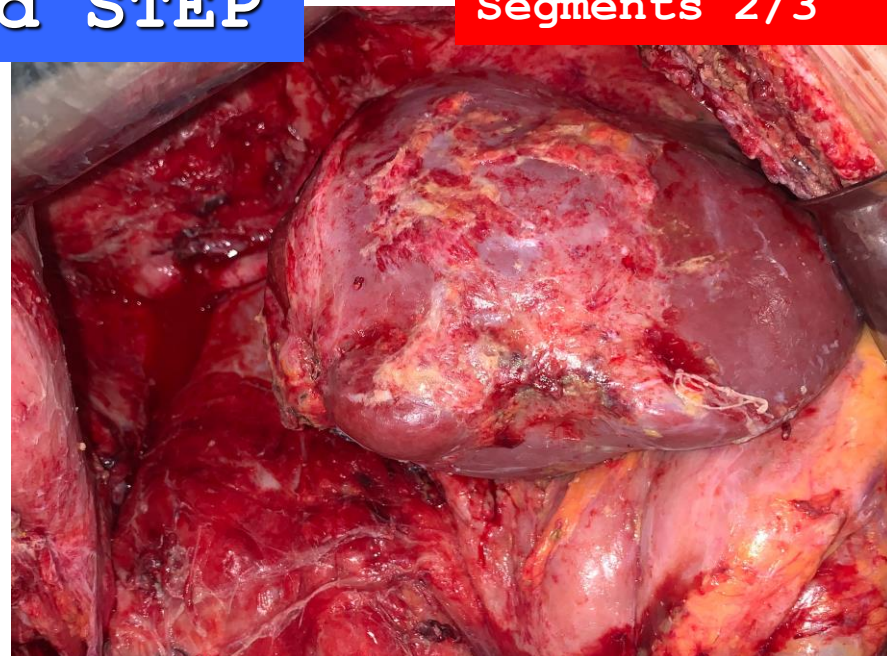
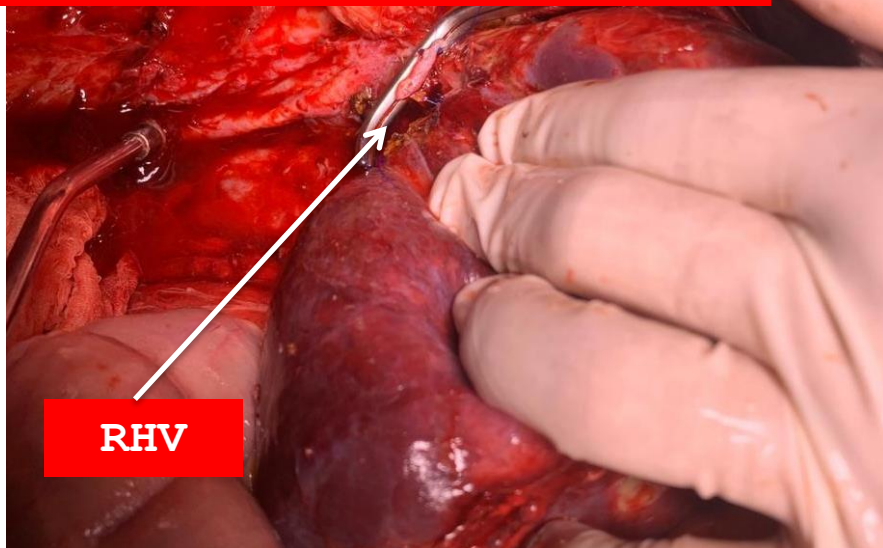
FLR :477.8 ml / %52.2 ☒

Courtesy: Prof. Deniz Balci (Ankara – Turkey)

ALPPS 2nd STEP

Segments 2/3

7 days after step 1



SPECIMEN

POSTOPERATIVE COURSE

- ☐ ICU 3 days
- ☐ No complications $\geq 3b$ (clavien-dindo)
- ☐ Length of stay 12 days

☐ CHEMOTHERAPY

CASE 2



ALPPS MONOSEGMENT FOR COLORECTAL LIVER METASTASIS

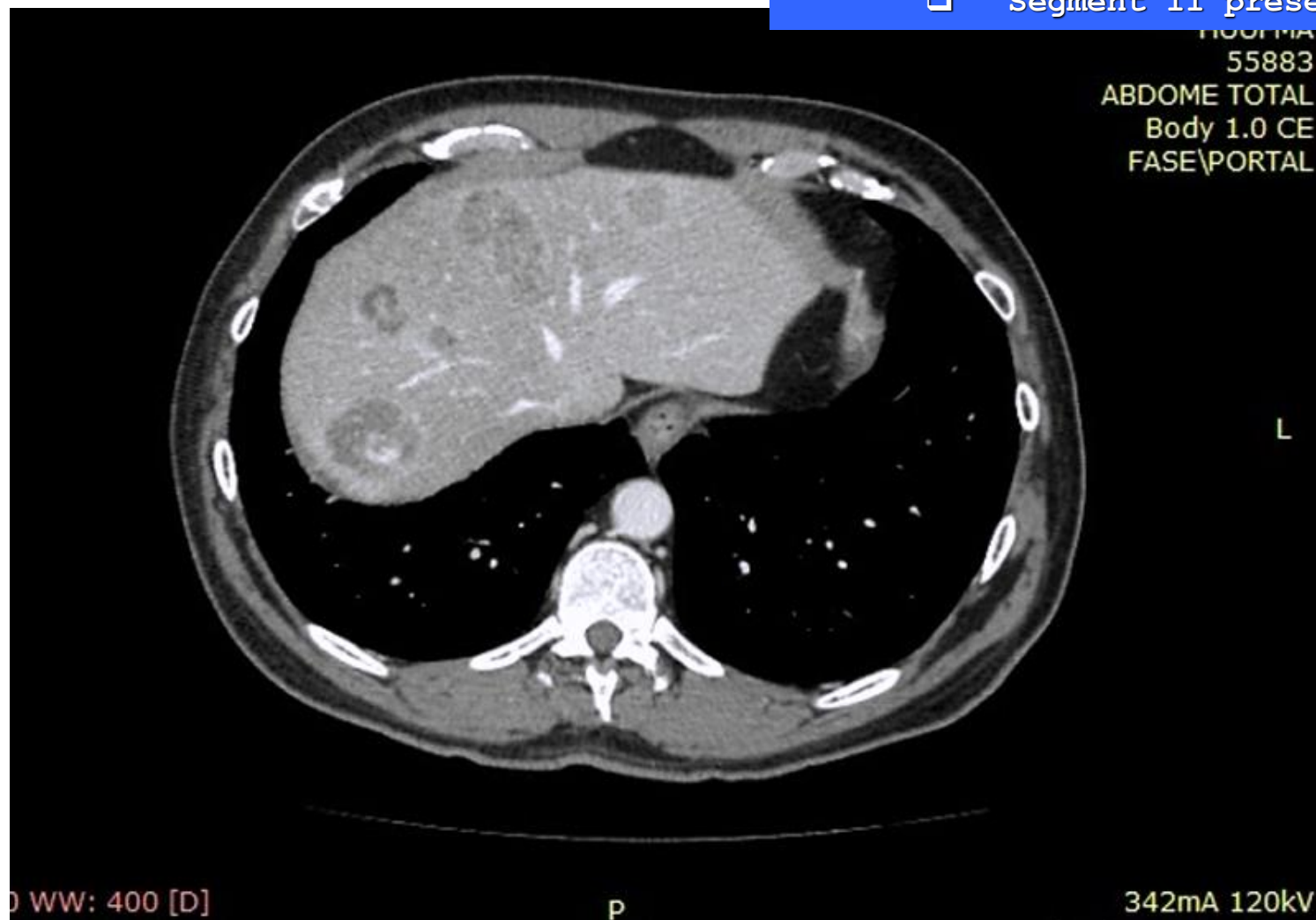
CASE 2

- ❑ 54-year-old male patient
 - ❑ Synchronous liver metastases
 - ❑ Left sided colon tumor
- ❑ Primary resected previously
 - ❑ Colostomy
- ❑ Chemotherapy
 - ❑ FOLFOX 12 cycles

❑ KRAS Wild-type

☐ Liver metastases:

- ☐
- Segment II preserved



❑ 1st step

❑ Decision (Tumor board)
ALPPS



□ 1st step



□ 1st step



CT scan

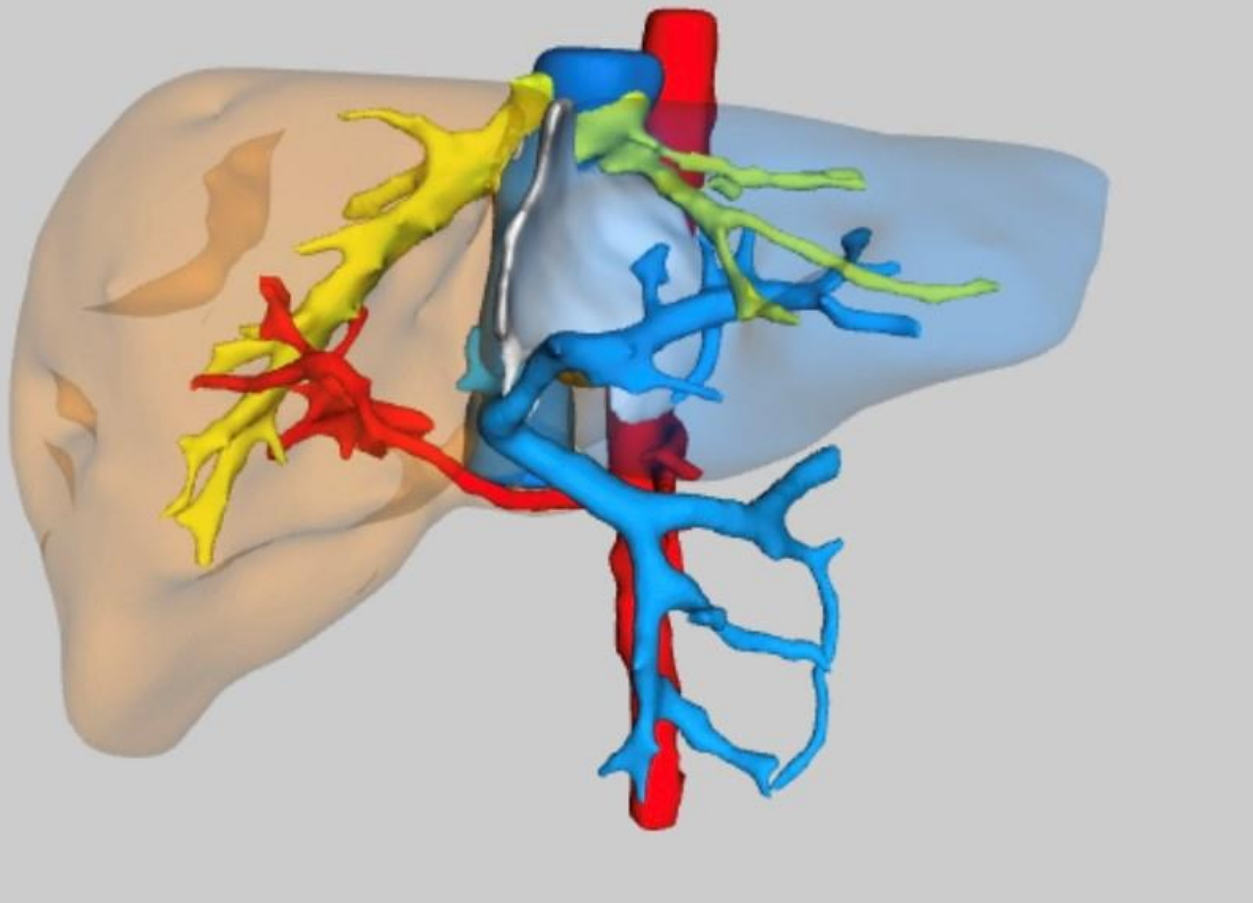
- ❑ After 3 weeks
- ❑ Portal phase



VOLUMETRY

Segment 2

FLR 29.9%



LIVER
VISION

Name

DE RIBAMAR MARINHO BALATA

Gender, Age

M , 054Y, 14776081

Date

27.03.2021

Liver View



Serie/s View

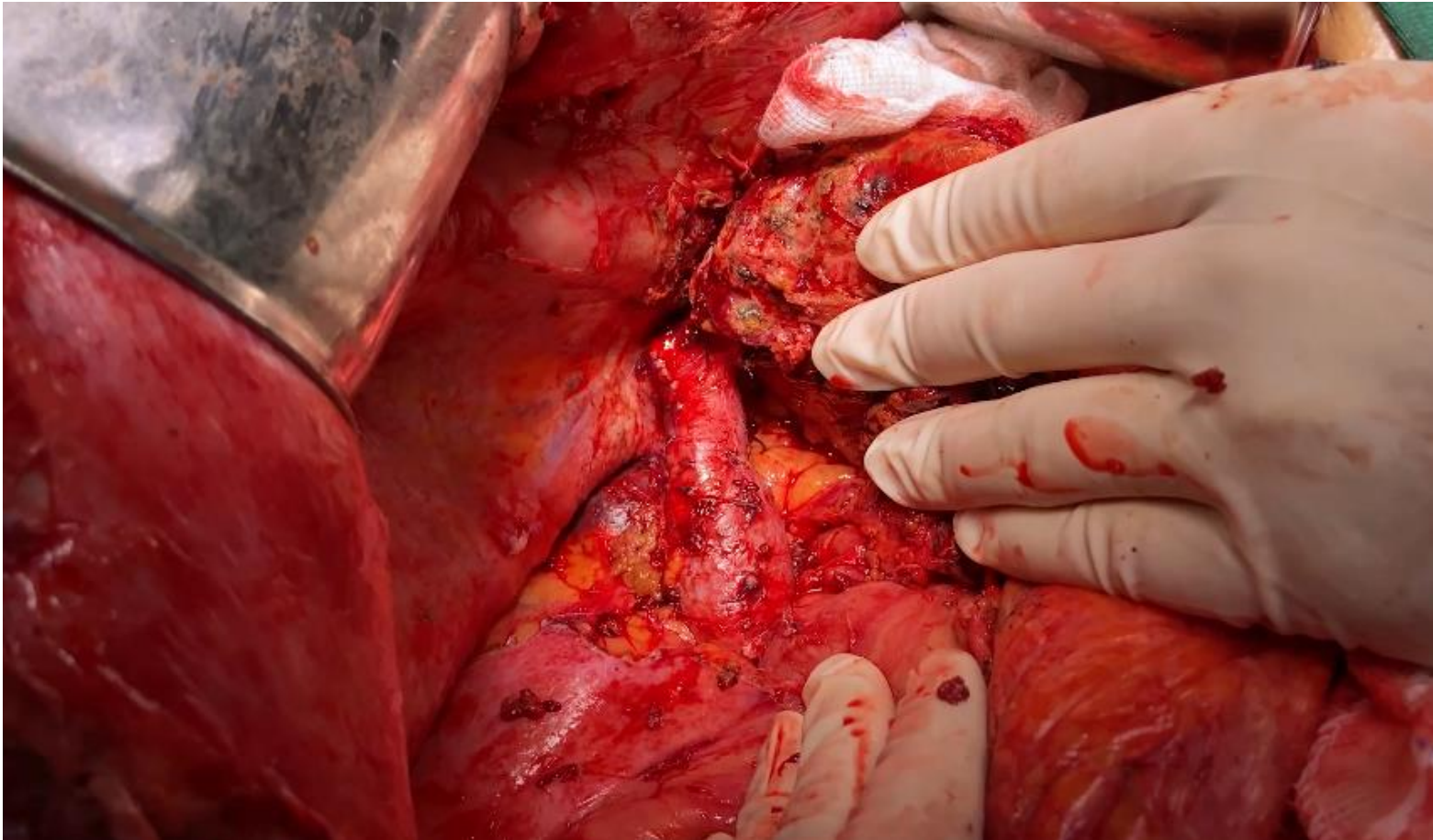
Liver

Courtesy: Prof. Deniz Balci (Ankara - Turkey)

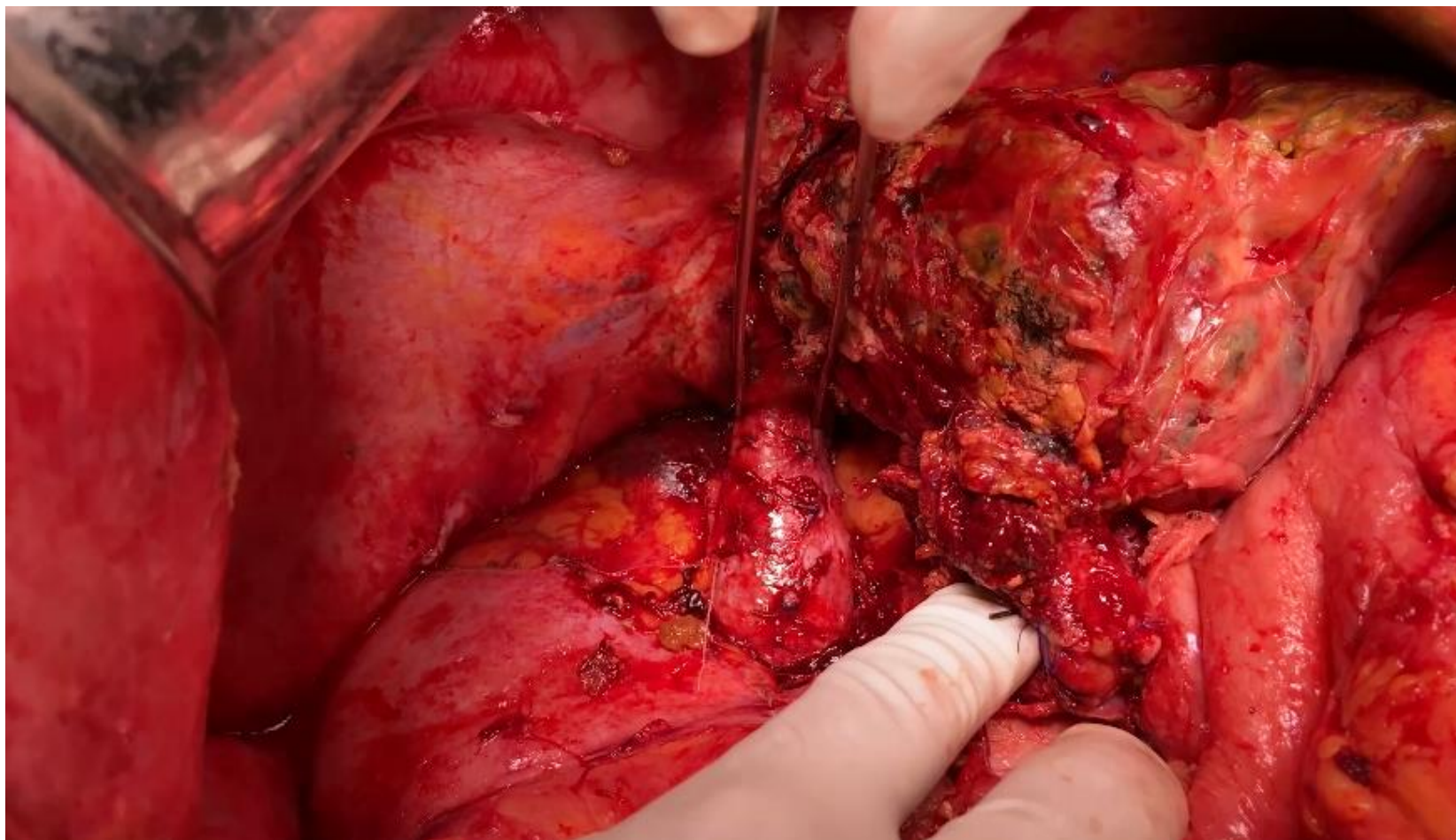
❑ 2nd step

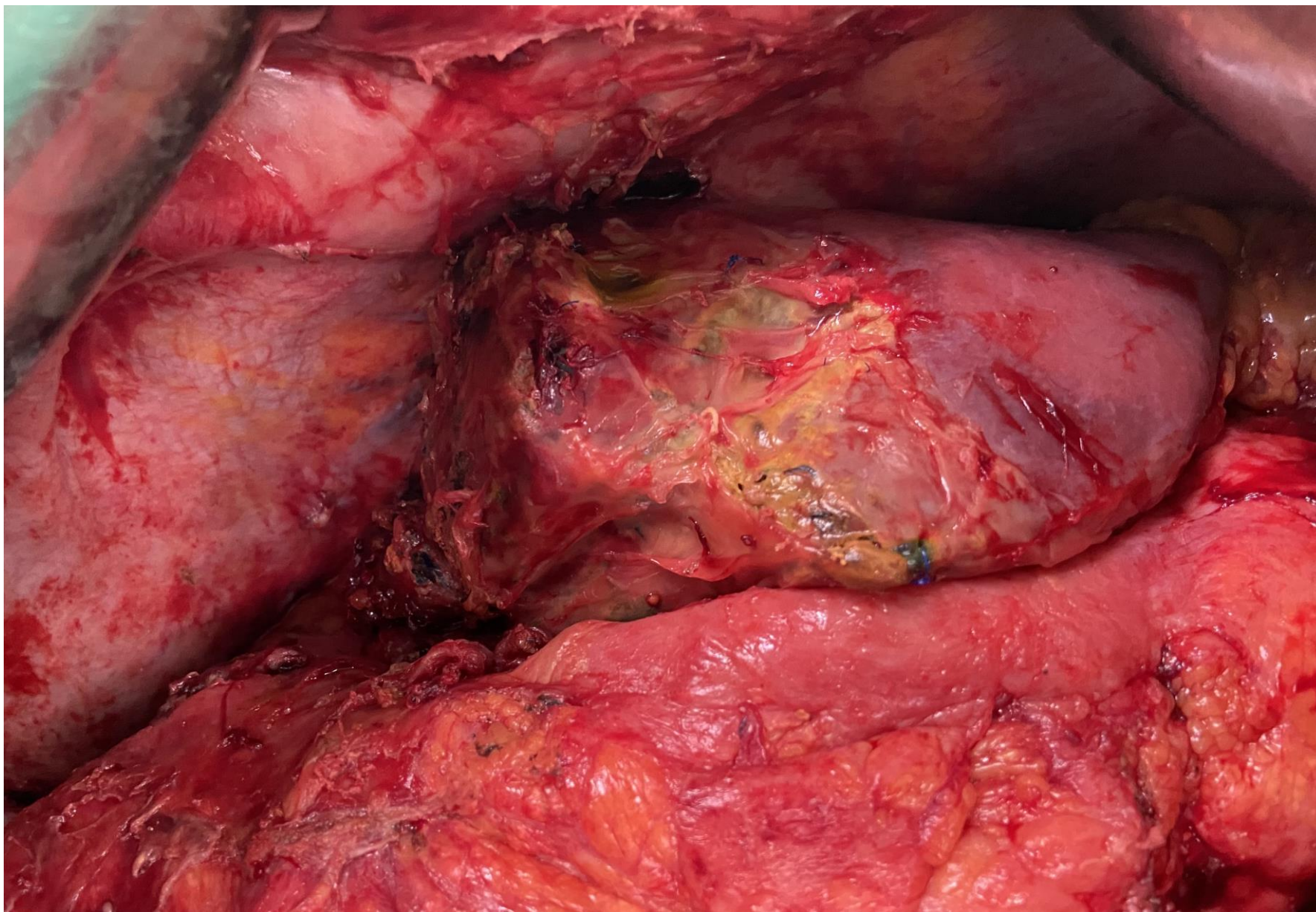
❑ Decision:

❑ Wait two more weeks



□ 2nd step







☐ SPECIMEN



Thanks !

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